

**CRAB ORCHARD NATIONAL WILDLIFE REFUGE CERCLA PROJECT
MONTHLY PROGRESS REPORT
JULY 2018**

**ADDITIONAL AND UNCHARACTERIZED SITES
OPERABLE UNIT (AUS OU)**

1.0 Actions toward Achieving Compliance

Feasibility Study (FS).

The U.S. Fish and Wildlife Service (FWS) continues to provide technical direction to Shannon and Wilson Inc. (SWI) on the draft FS.

Natural Attenuation in Groundwater

Review of the preliminary data for the volatile organic constituents and carbon isotope data support degradation occurred in several wells. SWI will be preparing a natural attenuation report. In support of FWS, the U.S. Geological Survey will assist SWI with interpretation of part of the data. The results will be used to further inform alternative analysis in the FS.

Area 8 Copper Site

The pond is contaminated with dissolved copper from buried waste in a dump along the shoreline and beneath the water. The pond in Area 8 South discharges surface water through a culvert and overflows a low spot of the road under heavy rain events or high water levels into the creek. Surface water samples are collected monthly and tested for dissolved copper at a location(s) near the culvert that discharges into the creek and where it overflows the low spot of the road. The dissolved copper concentration of 2.9 ug/l in a surface water sample collected July was below the Illinois chronic aquatic water quality criteria. Concentrations of dissolved copper have continued to decline since March 2018. Hardness values peaked in June and are declining. These dissolved copper concentrations appear to be influenced by rainfall and stream flows.

Draft Evaluation of Future Groundwater Risk

The results of the evaluation indicated risks for human and ecological receptors and pathways related to potable and non-potable uses associated with the purposes of the Federal facility including conservation, recreation, industrial, and agricultural. FWS is revising the Groundwater Risk Assessment.

Site Wide Land Use Controls

FWS distributed a technical memorandum outlining the analysis of historic air photography and soil chemical testing results of a parcel of land proposed for construction of a bunkhouse located near FWS' maintenance shop and within the former Illinois Ordnance Plant. The findings suggest the proposed location was an open field dating back to the 1930's. The soil concentrations results in the upper 4 inches were comparable to background concentrations. FWS requested Agency review of the proposed action to remove residential restriction for the proposed bunkhouse location.

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2.0 Status/Results of Sampling, Tests, and Other Data

- The results for dissolved copper and hardness parameters, calcium and magnesium, were received for the surface water sample collected June 13th from Area 8 South Copper Pond. The dissolved copper concentration of 2.9 ug/L was below the water quality criteria for the protection of aquatic life (chronic criteria of 6.6 ug/L).

3.0 Actions Scheduled for Next Month

- Continue to provide technical direction to S&W on preparation of the FS.
- Evaluate results of monitored natural attenuation bench study.
- Revise the Groundwater Risk Assessment.
- Explore options for management or containment of surface water at Area 8 Copper Pond.
- Conduct surface water sampling at Area 8 Copper Pond.

4.0 Modification or Delays Encountered or Anticipated

None to report.

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AREA 7 PESTICIDES SITE

1.0 Actions toward Achieving Compliance

The Government has entered into formal negotiations with Great Lakes for the response activities at the Site. Great Lakes provided its Good Faith Offer, dated July 13th to finance and implement the response action. A Consent Decree is being prepared. The final Remedial Design Remedial Action (RD/RA) Work Plan will be attached to a Consent Decree to define the scope of work for implementation of the response action. The removal action will be initiated once the Consent Decree is lodged. The sequence of work includes removal of the warehouses followed by soil sampling to delineate the excavation boundaries and soil removal and off-site disposal. FWS continues to provide technical direction to TRC on preparation of documents for implementation of the response action.

The draft final Health and Safety Plan and written responses to U.S. Environmental Protection Agency (USEPA) comments were distributed July 2nd for Agency review. The Draft Final Sampling and Analysis Plan (SAP) consisting of a Field Sampling Plan and a Quality Assurance Plan Addendum was distributed to the Agencies on July 20th.

2.0 Status/Results of Sampling, Tests, and Other Data

None to report.

3.0 Actions Scheduled for Next Month

- Continue coordination and planning for the RD/RA.
- Finalize the Health and Safety Plan, Sampling and Analysis Plan, and Site Restoration Plan.

4.0 Modification or Delays Encountered or Anticipated

None to report.

5.0 Other Significant Activities

None.

6.0 Personnel Changes

None to report.

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PCB OPERABLE UNIT

1.0 Actions toward Achieving Compliance

Operations and Maintenance (O&M) for Plumes 1 and 3

Groundwater Pump and Treat

Operations and monitoring for the Plume One pump and treatment system continued well. The average flow through the system was 3.4 gallons per minute. No PCBs were detected in the effluent.

Annual Groundwater Monitoring

A draft Seventh Annual Report was prepared and distributed to Schlumberger for review.

Updated Quality Assurance Project Plan (QAPP) and O&M Plan

The QAPP and O&M Plan are being updated. The QAPP will be revised consistent with USEPA Uniform Federal Policy and reflect changes in project organization due to shift in responsibilities from Schlumberger to the FWS.

Plume Two Remedial Design

The consent decree amendment for the Plume Two interim remedy is under review by U.S. Department of Justice.

2.0 Status/Results of Sampling, Tests, and Other Data

The validated analytical results for groundwater samples collected for annual monitoring of Plumes One and Three in April 2018 were received.

3.0 Actions Scheduled for Next Month

Distribute the draft Seventh Annual Report to the Agencies for review. Participate in a conference call with U.S. Environmental Protection Agency USEPA regarding their QAPP Policies.

4.0 Modification or Delays Encountered or Anticipated

None to report.

5.0 Other Significant Activities

None to report.

6.0 Personnel Changes

None to report.